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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/719,507

11/21/2003

Hans-Norbert Brand

K 217

3015

7590

10/30/2006

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EXAMINER

SUNG, CHRISTINE

ART UNIT

PAPER NUMBER

2884

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/719,507	<b>Applicant(s)</b> BRAND ET AL.	
	<b>Examiner</b> Christine Sung	<b>Art Unit</b> 2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/03</u> . | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. The amendment filed on August 17, 2006 has been accepted and entered.

***Election/Restrictions***

2. Applicant's election of claims 4-9 in the reply filed on August 17, 2006 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
5. Claims 4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burnell-Jones (US Patent 6,207,077 B1).

Regarding claim 4, Burnell- Jones discloses a method for the manufacture of thermo-luminescence detectors with a coded cover layer, comprising the following steps:

a) Coating thermo-luminescence crystals (column 12, line 9- column 13, line 16) with a pigmented (column 16, lines 16-18) silicon (column 1, lines 52-54) including a solvent (column 16, line 19-24) resin (column 15, lines 45-50) to form a uniform cover layer,

b) pre-tempering or pre-accelerating said cover layer at a temperature so as to evaporate to a large extent the solvent from the cover layer (column 16, lines 40-45),

c) coding the cover layer by almost quantitative vaporization of areas of the cover layer by means of a laser in accordance with a selectable pattern or "liquid writing" (column 11, line 25-35), and

d) tempering or curing the coded cover layer at a temperature (column 37, lines 40-50).

Burnell-Jones does not explicitly specify the claimed pre-tempering temperature or the curing temperature. However, determining the optimum pre-tempering temperature/time and curing temperature would be dependent upon the selected materials. One of ordinary skill in the art would be motivated to use the claimed temperature and pre-tempering times in order to produce a TLD with the proper properties. Burnell-Jones discusses adapting the basic procedure for various applications (see examples 1-11) dependent upon the desired affect, i.e. gel coats and applications for fiberglass coatings, etc. One of ordinary skill in the art would be motivated to use the claimed pre-tempering temperature/time and the curing time with the invention as disclosed by Burnell-Jones, in order to reduce unwanted effects (i.e. running or sagging of gel coats (see column 15, lines 62-66)) and decrease the amount of time required to produce the TLD.

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Regarding claim 6, Burnell- Jones discloses that the thermoluminescence crystals are coated with said silicon resin by a spray-painting procedure (column 16, lines 33-35)

Regarding claim 7, Burnell-Jones discloses that the optimum thickness of the cover layer depends upon the particular desired properties of the final product (column 11, lines 59-61). One of ordinary skill in the art would be motivated to manufacture a detector with a cover layer with the claimed thickness for applications in textile articles (see column 3, lines 16-19), where thin films are required.

Regarding claim 8, Burnell-Jones discloses that the pigment particles are black iron oxide (Column 2, lines 6-14, metal oxides) with a particle size of 2-4 microns (Column 29, lines 1-3).

Regarding claim 9, Burnell-Jones discloses that the pigment content is between 50% and 60% (column 12, lines 45-46).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burnell-Jones (US Patent 6,207,077 B1) in view of Hoelsher et al. (US Patent 5,083,031 A).

Regarding claim 5, Burnell-Jones discloses the limitations set forth in claim 4 but does not specify the step of placing the thermoluminescence crystals in a holder in a two-dimensional array and are removed from the holder before the final tempering. However, Hoelsher discloses a method of manufacturing dosimeters and discloses that the crystal or phosphor is placed in a 2-D array (see figure 9) and is removed (the substrate is cut up, see figure 13) before curing (See figure 12). One of ordinary skill in the art would be motivated to use the method as disclosed by Hoelsher with the invention as disclosed by Burnell- Jones in order to increase mass-production of TLD dosimeters.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 571-272-2448. The examiner can normally be reached on Monday- Friday 9-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CS

Christine Sung  
Examiner  
Art Unit 2884  
  
OTILIA GABOR  
PRIMARY EXAMINER